

### **Amendments to the Specification**

Please replace the Paragraph on Page 6, line 22 - Page 7, line 2 with the following marked-up replacement paragraph:

-- Where successive values for a defined metric have been gathered, those values can be processed in a trend module generator 56 to determine whether there is a recognizable trend in the metric values over time. Where a metric is trending toward an unacceptable value, an alert generator function 58 can generate and send an anticipatory alert to the service provider in advance of an actual violation. The anticipatory alert gives the service provider time to take steps which will head off an actual violation of defined performance requirements. --

Please replace the Paragraph on Page 7, lines 3 - 17 with the following marked-up replacement paragraph:

-- Figure 4 is a plot of a specific service metric over several sampling intervals. The specific service metric is ping time on a particular route between a first network station and a second network station; i.e., the time required for the first station to send a ping or query to the second station and to receive a response from the second station. Typically, the first station, which may be a network management station, is required to perform a minimum number of ping tests over a standard sampling interval 60 which, for purposes of this description, is assumed to be a 24-hour day. The actual or raw samples gathered over the course of each sampling interval can be processed to obtain an average ping value representing the average network performance over the entire day. Object 62 represents the average ping value over a first sampling interval 60. As a matter of convention, object 62 is shown as occurring at the midpoint of the interval even though

its value can't be determined until the interval has ended. To establish a trend in actual network performance, ping times are taken throughout the day and are averaged to establish the actual network performance for that day. Objects 64 and 66 represent the ping time averages for the second and third sampling intervals on the plot. --

Please replace the Paragraph on Page 10, lines 1 - 3 with the following marked-up replacement paragraph:

-- To determine whether a particular set of samples are reliable, the mean value  $y_{mean}$  and the standard deviation  $s$  of the set are used to generate a Confidence Percentage value  $CP$  where --

Please replace the Paragraph on Page 10, lines 9 - 12 with the following marked-up replacement paragraph:

-- Where a set of samples gathered during a particular sampling interval [[are]] is not to be used as failing to meet reliability tests, acceptable samples gathered during preceding and following sampling intervals can still be used to establish the trend in network performance. --

Please replace the Paragraph on Page 10, lines 13 - 20 with the following marked-up replacement paragraph:

-- Figure 5 is a flowchart of method steps that are performed in implementing the present invention. The initial step 74 is to perform a system test which generates raw sample values. The ping response time test described above is just one example of many types of system tests which might be performed to obtain a measure of actual network performance. Each test 74 is followed

by a time check 76 which determines whether the current sampling interval has just ended or expired. If the sampling interval has not expired, a second time check 77 is made to determine whether [[a]] an inter-sample interval timer has expired. --

Please replace the Paragraph on Page 11, lines 17 - 23 with the following marked-up replacement paragraph:

-- As described earlier, the set of samples may or may not be used depending on the confidence percentage *CP* for the set; that is, the ratio of the set's standard deviation to its mean or average value. The *CP* value is calculated in step 88 using the earlier-described equation and then compared to a predetermined threshold percentage in step 90 to determine whether the set's *CP* value falls within acceptable limits. If the set's *CP* value falls outside the acceptable limits, the trend determination process is ended without using the "unreliable" set of samples. --

Please replace the Paragraph on Page 13, line 23 - Page 14, line 7 with the following marked-up replacement paragraph:

-- Referring first to Figure 7, which illustrates the premise of the alternative process, an alert is generated at time t3 because the trend characterized by line 114 would result in the violation threshold being exceeded within two days of time t3. However, for the current trend represented by line 118 (beginning at time t3 and ending at time t4), it can be seen that the lesser slope of the current trend would not, if continued, cause the trend to reach the violation threshold ~~will not be exceeded~~ within two days of time t4 even if the trend continues unchanged. Under the noted conditions, no alert would be issued at time t4. If an alert would not be issued at time t4

based on the then current trend, it would be illogical to allow a previously-generated alert to remain in force. If a determination is made that current conditions do not warrant generation of an alert at current time  $t_4$ , then pending alerts based on past conditions are canceled. --